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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/637,608	08/11/2003	Patrick Flynn	ENER-0001-4	2473
22506	7590	10/20/2004	EXAMINER	
JAGTIANI + GUTTAG 10363-A DEMOCRACY LANE FAIRFAX, VA 22030			LANGEL, WAYNE A	
			ART UNIT	PAPER NUMBER
			1754	

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER
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ART UNIT	PAPER NUMBER
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DATE MAILED:

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

☐ This application has been examined ☒ Responsive to communication filed on 8-19-04 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s),        days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

**Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:**

- |   |   |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice of Draftsman's Patent Drawing Review, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449.                 | 4. <input type="checkbox"/> Notice of Informal Patent Application, PTO-152.       |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474.     | 6. <input type="checkbox"/> _____   |

**Part II SUMMARY OF ACTION**

1. ☒ Claims 1-44 are pending in the application.

Of the above, claims 5, 6 and 12-44 are withdrawn from consideration.

2. ☐ Claims \_\_\_\_\_ have been cancelled.
3. ☐ Claims \_\_\_\_\_ are allowed.
4. ☒ Claims 1-4 and 7-11 are rejected.
5. ☐ Claims \_\_\_\_\_ are objected to.
6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.
7. ☐ This application has been filed with Informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed \_\_\_\_\_, has been ☐ approved; ☐ disapproved (see explanation).
12. ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

**EXAMINER'S ACTION**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 7, 10 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by French 2645622. French '622 discloses a composition comprising hydrogen and a mercaptan. (See the English Abstract.)

Claims 2-4, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over French 2645622. It would be prima facie obvious to employ a selenium compound as the odorous compound in the process of French '622, since the reference suggests in the English Abstract that any "odorous gaseous product" may be added to the hydrogen. Regarding claims 8 and 9, it would be obvious to employ the mercaptan in an amount of 0.1 to 40 ppm of the composition of French '622, since it would be within the skill of one of ordinary skill in the art to determine a suitable or optimum amount of the mercaptan to employ.

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Cortright et al. Cortright et al disclose a composition comprising hydrogen and methane at col. 15, lines 17-32 and col. 16, lines 42-53.)

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by \*Ratcliffe et al. Ratcliffe et al disclose a composition comprising hydrogen and methane (See the English Abstract.)

Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cortright et al. It would be obvious to separate methane from the hydrogen produced according to the process of Cortright to the extent that it is included in an amount of 0.1 to 40 ppm of the resulting composition. One of ordinary skill in the art would be motivated to do so, since Cortright et al disclose at col. 1, lines 17-28 that the hydrogen is to be employed in a fuel cell.

Claims 1, 10 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Wachs. Wachs discloses a composition comprising hydrogen and mercaptans in the paragraph bridging columns 3 and 4.

Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wachs. It would be prima facie obvious to separate the mercaptan from the hydrogen in the process of Wachs to the extent that it contains 0.1 to 40 ppm mercaptans, since Wachs teaches at col. 6, lines 26-46 that impurities should be separated from the hydrogen..

.Cimini et al is made of record for disclosing a gaseous composition comprising hydrogen and carbonyl sulfide.

Any inquiry concerning this communication should be directed to Wayne Langel at telephone number 571-272-1353.

Application/Control Number: 10/637,608

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A handwritten signature in black ink, reading "Wayne A. Langel". The signature is written in a cursive style with a large, stylized "L" and "A".

Wayne Langel  
Primary Examiner  
Art Unit 1754